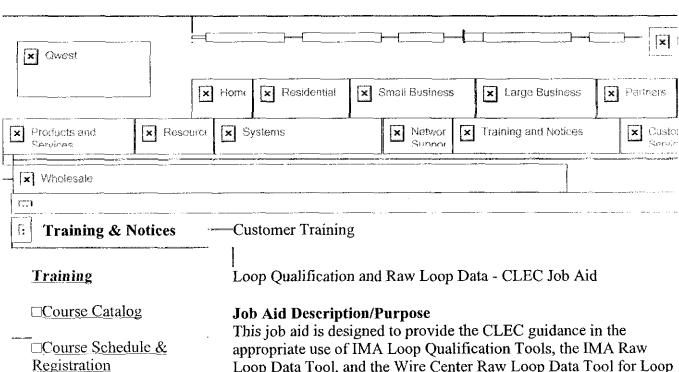
### Batch Hot Cut Timeline (7 Business Day Due Date)

	Day 0 Monday	<b>Day 1</b> Tuesday	Day 2 - 3 Wednesday	<b>Day 4</b> Thursday	<b>Day 5 -6</b> Friday / Monday	<b>Day 7</b> Tuesday
CLEC	CLEC LSR - by 7PM	CLEC Switch Translations by midnight		CLEC fix	ces DT	Trap & Trace, Porting Done
				Issues CFA supp by 7PM MST		
Qwest	Service Order Issued Assignments Done	Design Issued	CO Pre-wiring DT & ANI done	CFA changes received, processed & FOC issued if supp sent by 7PM		CO Lift & Lay, DT & ANI Order status reported in Status Tool Orders with NDT removed
	IMA FOC issued		DT Troubles reported in Status Tool to CLEC			from Batch and CNR jeop issued IMA reports produced

Course Feedback



This job aid is designed to provide the CLEC guidance in the appropriate use of IMA Loop Qualification Tools, the IMA Raw Loop Data Tool, and the Wire Center Raw Loop Data Tool for Loop Qualifications. This job aid may also be used as a guide for the qualification of DSL. The tools described in this job aid support the pre-order functions for 2/4 wire non-loaded loops, Asymmetrical Digital Subscriber Loop (ADSL) compatible loops, Integrated Switched Digital Network (ISDN) Basic Rate Interface (BRI) capable loops, xDSL-I capable loops, Line Sharing, Line Splitting, Loop Splitting, and Shared Distribution Loops.

Note: This job aid does not contain information for HICAP Service requests or Design Service requests (see the IMA User's Guide).

#### **Objectives**

While using this job aid you should be able to:

- Describe the terms of Facility Availability, Loop Qualification and Raw Loop Data
- Describe the likes and differences of Loop Qualifications and Raw Loop Data queries
- Navigate the IMA Loop Qualification tools, and Raw Loop Data tools
- Obtain Raw Loop Data from the Wire Center and IMA Raw Loop Data Tools

#### **Prerequisites**

- Qwest 101 "Doing Business with Qwest"
- Basic Telephony course and/or equivalent industry experience
- Working knowledge of Owest IMA EDI/GUI ordering system
- A CLEC end-user must have telecommunication engineering knowledge to interpret the significance of raw loop data

#### Audience

The target audience for this job aid is primarily CLECs and External Customers.

#### How to Obtain

It is not necessary to register to obtain and use this job aid. The training course catalog is available to External Customers and CLECs on the <u>Owest Wholesale Markets Customer Training Web site</u>.

To obtain this job aid, scroll through the Course Catalog until you find the listing "Loop Qualification and Raw Loop Data-CLEC Job Aid". Click the link "Click Here to Download".

For product specific information view the Wholesale Markets Web site.

If you have any questions regarding the use of this job aid, please call your Service Manager. If you have questions on the content please contact Michelle Thacker of Wholesale Markets at 303-382-5725, or email your comments using to the following email address, <a href="mailto:mthacke@qwest.com">mthacke@qwest.com</a>.

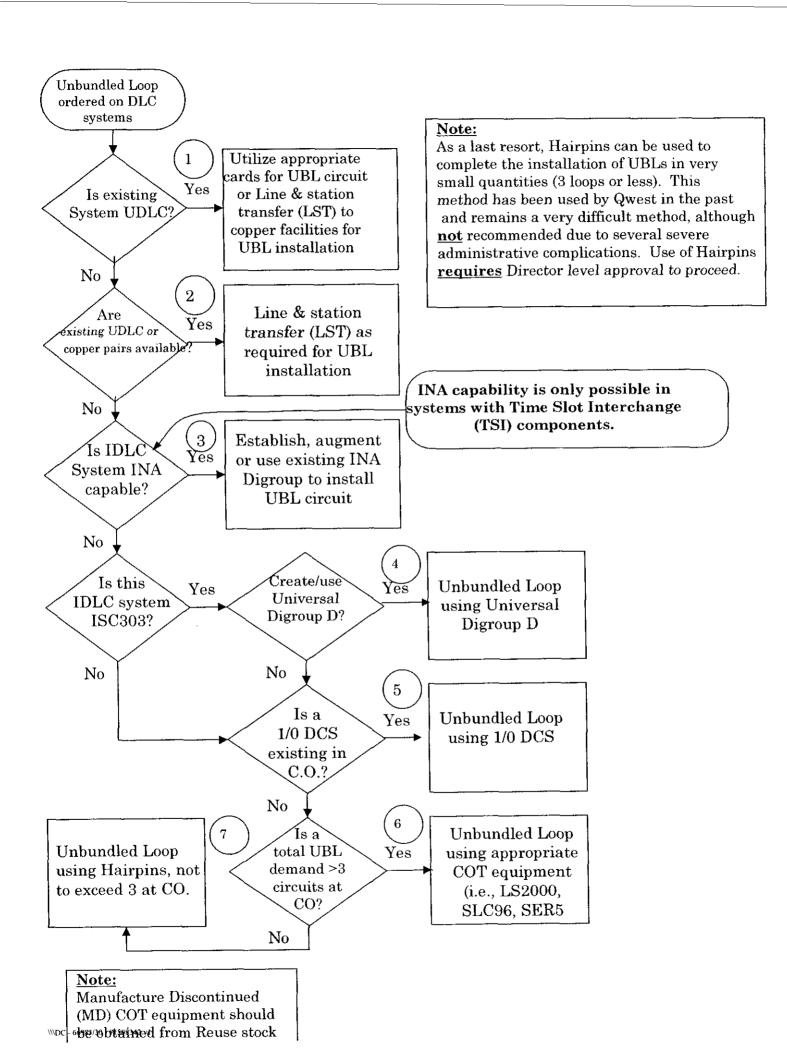
This Course Last Updated: May 30, 2003 This Page Last Updated: October 31, 2003



Copyright © 2004 Qwest Communications International Inc. All Rights Reserved | Legal Notices | Pri

RLD Request	<b>GUI SUCCESS</b>	GUI FAILURE	EDI SUCCESS	EDI FAILURE	TOTAL
Oct'03	9225	3241	0	0	12466
Nov'03	6450	2811	0	0	9261
Dec'03	7250	2870	1	0	li
Jan'04	6787	2660	0	0	
Feb'04	7188	2454	C	0	
Mar'04	8008	2930	C	0	1
Apr'04	5754	2698	6	2	8460
May'04	5026	2666	C	0	7692
June'04	5077	2443	C	C	
July'04	5169	2432	2	) C	
Aug'04	5933		3		8641
Sep'04	6706	L	2		9408
Total	78573		7	2	111197

# Exhibit DP-10 has been submitted pursuant to the Protective Order in CC Docket No. 01-338 and WC Docket No. 04-313



### **EXHIBIT DP-11.1**

### Legend for IDLC Flow

### **Solution provisioning intervals:**

- 1) UBL circuit cards 5 days LST – 5 days
- 2) LST 5 days
- 3) INA Digroup (D4 Channel Bank, dedicated DS1) 5 days if span capacity
- 4) Order COT 90 days 120 days
- 5) 1/0 DCS (Adtran BR110) 90 days 120 days
- 6) LS 2000, SLC 96, Series 5 90 days 120 days
- 7) Hairpin 15 days after approval

Exhibit No. (LB-2HC) Docket No. UT-033044 January 23, 2004

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of Qwest Corporation to Initiate a Mass-Market Switching and Dedicated Transport Case Pursuant to the Triennial Review Order

Docket No. UT-033044

Report of Lorraine Barrick

### **Table of Contents**

	Executive Summary	
	Introduction	
3.	Background	4
	The Scope of Work	
5.	Overview of the Current Hot Cut Process	6
	Overview of the Batch Hot Cut Process	
٠.	As Planned	
	Key Process Differences	
	Order Creation and Acceptance.	
	Planning and Pre-wire (DVA)	o
	Cut Over	. 0
	Cut Over	9
_	As Tested	
	Assumptions Regarding Batch Hot Cut Process	
8.	Qwest Historical Hot Cut Volumes and Volume Forecast	
	Total Daily Volume	13
	2002	
	2003	13
	Daily Volume by Central Office	. 14
	2002	14
	2003	. 15
	Multi-CLEC Hot Cut Volume	. 18
	2002	18
	2003	
	Volume Forecast of UNE-Loop	18
	Summary of Historical and Forecast Volume Analysis	20
^	Testing Procedures Performed	20
9.	Testing Procedures Performed.	20
	Preliminary Live Trial of the BHC Process	21
	Second Round Live Trial of the BHC Process	. 21
	Comparison of Hot Cut Process to the BHC Process	. 22
	Test Documentation	. 23
10	). Testing Benchmarks	. 23
11	I. Testing Results	. 24
	Preliminary Live Trial of the BHC Process	. 24
	Service Delivery Observations	. 25
	Line Provisioning Center and Design Services	. 26
	QCCC Observations	. 27
	CO Observations	. 28
	Summary of Preliminary Live Trial	. 30
	Second Round Live Trial of the BHC Process	. 31
	Service Delivery Observations	. 31
	QCCC Observations	.31
	CO Observations	32
	Summary of Second Round Live Trial	34
	Comparison of Hot Cut Process to the BHC Process	34
	Comparison or Hot Cut Process to the Brid Process	35
	BHC Communication between Qwest and CLECs	. აა 27
	CO Workflow	. ა/ იი
	Overall Trial Testing Considerations	. 38
12	2. Staffing the BHC Process	. 39
	Service Delivery Staffing	. 39
	QCCC Staffing	. 40
	CO Staffing	. 40
4:	3 Conclusion	. 41

### **Table of Exhibits**

Exhibit	Description
Exhibit 1	Resume of Lorraine Barrick
Exhibit 2	Glossary of Terms Used
Exhibit 3	Locations Visited
Exhibit 4	Interviewee List
Exhibit 5	Proposed Batch Hot Cut Process
Exhibit 6	Process Improvements Not Available at the Time of Our Testing
Exhibit 7	Monthly Volume of Hot Cuts Historically (2002 and 2003) Performed by State
Exhibit 8	Central Offices Historically (2002 and 2003) Performing 50 or More Hot Cuts per Day
Exhibit 9	Daily Volumes of Hot Cuts Performed in 2002 and 2003 for Selected Central Offices
Exhibit 10	Testing Summary: Preliminary Live Trial
Exhibit 11	Testing Summary: Second Round Live Testing
Exhibit 12	LSR Detail From the Two Live Trials
Exhibit 13a	Service Order Details of Preliminary Live Trial
Exhibit 13b	Service Order Details of Second Round Live Trial
Exhibit 14	Confidential Testing Information

1

1. Executive Summary

2	I am a certified public accountant. I have been engaged in business and financial consulting
3	since 1988. I have extensive experience in assisting companies in the telecommunications
4	industry.
5	
6	I was retained by Qwest Corporation (Qwest) through Hitachi Consulting to review and test its
7	processes and procedures pertaining to the Batch Hot Cut (BHC) processes defined below.
8	was assisted in my work by a team of telecommunications and process consultants from
9	Hitachi Consulting. This report summarizes the work performed by me, or under my
10	supervision, and my opinions resulting from this work.
11	
12	Our work included the following:
13	Gaining an understanding of the existing hot cut process;
14	Studying Qwest's hot cut performance to date;
15	<ul> <li>Reviewing the proposed BHC process, as well as public CLEC comments and</li> </ul>
16	concerns regarding that process;
17	<ul> <li>Making recommendations for process improvements;</li> </ul>
18	<ul> <li>Comparing the current hot cut process to the proposed BHC process;</li> </ul>
19	Developing a testing plan to be used to judge the quality and efficiency of the
20	proposed BHC process; and,
21	Testing the BHC process.
22	
23	Qwest has demonstrated, based on historical data for the existing hot cut process, that it can
24	handle large volumes of UNE-P to UNE-Loop conversion requests. Qwest has
25	demonstrated, on many occasions, the ability to process more than 1,000 hot cut requests in
26	a day. Qwest has also demonstrated the capability to consistently perform between 25 and

100 hot cuts per day per central office (CO) and to exceed these amounts when required. 1 2 with 30-day trouble rates of less than 1%. 3 Qwest has serviced the above volumes using the existing hot cut process. Currently, Qwest 4 processes hot cuts individually on a first in, first out basis. The proposed BHC process will 5 6 implement significant improvements that will enable increased efficiencies, seamless service 7 and enhanced scalability as compared to the existing hot cut process. 8 The BHC process was created to make the hot cut process described above more scalable 9 10 and efficient for larger volumes of hot cuts. The process groups multiple service orders for hot cuts into "batches." A CLEC will be required to submit a minimum of 25 lines and a 11 maximum of 100 lines to create a batch. Significant efficiencies over the hot cut process are 12 created through front-end edit checks, process automation and streamlining of manual 13 processes. We have measured the benefit of several of these differences. The results 14 indicate that the process is substantially faster than the current process and the differences 15 we measured save many hours per day at the projected volumes. 16 17 We also tested Qwest's proposed BHC process with live trials using CLEC customers. Our 18 testing to date has included four batches of approximately 25 telephone numbers per batch. 19 In all cases, Qwest met 100% of its installation commitments, and no troubles were reported 20 for the preliminary live trial within the first 30 days. (The second two batches were cut within 21 a week of issuance of this report and, therefore, 30-day trouble report data is not available for 22 the second two batches.) As stated, Qwest met 100% of its installation commitments, which 23 exceeds the FCC's 90% on-time hot cut performance standard set forth in its Bell Atlantic 24 Section 271 decision. In fact, Qwest has demonstrated an ability to consistently meet and 25 26 exceed this benchmark. 27

1 Extrapolation of the Due Date activities of the COs for each of the live trials indicates that a 2 team of two technicians should be able to complete them in the course of an eight-hour shift. 3 Any remaining time in the shift, plus other shifts, could be used to conduct pre-wire activity for 4 other batches. 5 6 To scale to the Qwest forecasted volumes, additional resources will be required. Each of the 7 key departments have plans to scale as required. We have discussed these plans with 8 department management and nothing has come to our attention to suggest that they are 9 unreasonable. 10 In my opinion, based on the above, the BHC process as proposed represents significant 11 12 improvements in efficiency with acceptable levels of quality when compared to the existing 13 hot cut process. Nothing has come to my attention to suggest that this process will not scale to the forecasted volumes. 14 15 2. Introduction 16 I am a certified public accountant. I have been engaged in business and financial consulting 17 since 1988. Prior to that, I was an auditor for three years. My work experience includes 18 nearly 15 years at the public accounting and consulting firm of Arthur Andersen, LLP. When I 19 left Arthur Andersen in May of 2000, I was a partner in the Consulting Division of the Seattle 20 office. I have extensive experience in assisting companies in the telecommunications 21 22 industry. My resume is attached as Exhibit 1. 23 24 I was retained by Qwest through Hitachi Consulting to review and test its processes and procedures pertaining to the BHC processes defined below. I was assisted in my work by a 25 team of telecommunications and process consultants from Hitachi Consulting. This report 26

1	summarizes the work performed by me, or under my supervision, and my opinions resulting
2	from this work.
3	
4	This report assumes the reader's familiarity with the hot cut process and related subject
5	matter. A glossary of terms and acronyms used in this report is provided in Exhibit 2.
6	
7	During the course of our test work, we obtained information from electronic databases and
8	other Qwest systems that was captured in the course of Qwest operations. The scope of this
9	engagement was not to conduct an audit of any of this information under the Generally
10	Accepted Auditing Standards of the American Institute of Certified Public Accountants. We
11	relied on this information as discussed below.
12	
13	Certain information and assumptions were provided to us by Qwest. Any such information
14	upon which we relied is documented in the relevant report section.
15	
16	I reserve the right to change my opinion due to any new information that becomes available
17	to me.
18	
19	This report was prepared for the above-referenced matter and should not be used or referred
20	to for any other purpose.
21	
22	3. Background
23	The Federal Communications Commission (FCC), in its September 26, 2003, Triennial
24	Review Order (TRO), required any Incumbent Local Exchange Carrier (ILEC) seeking to
25	rebut the FCC's national presumption that Competitive Local Exchange Carriers (CLECs) are
26	impaired without access to unbundled switching in mass markets to establish a "batch hot cul

	process" for CLECs. Pursuant to that Order, Qwest petitioned many of the state
2	commissions within its 14-state region to open such a docket.
3	
4	The FCC found that a "seamless, low-cost batch hot cut process for migrating mass market
5	customers from one carrier to another is necessary, at a minimum, for carriers to compete
6	effectively in the mass market."1
7	
8	In conjunction with Qwest's petition to rebut the presumption of impairment, Qwest engaged
9	Hitachi Consulting to review and test its BHC process, to provide recommendations for
0	process improvement, and to determine whether, in my opinion, Qwest will be able to perform
1	the required number of hot cuts per CO per day necessary to both serve future demand and
2	migrate CLECs' embedded base of Unbundled Network Element Platform (UNE-P) clients to
13	Unbundled Network Element Loop (UNE-Loop), at an acceptable quality level.
14	
15	4. The Scope of Work
l5 l6	4. The Scope of Work  Our work included the following:
16	Our work included the following:
16 17	Our work included the following:  • Gaining an understanding of the existing hot cut process;
16 17 18	Our work included the following:  • Gaining an understanding of the existing hot cut process;  • Studying Qwest's hot cut performance to date;
16 17 18 19	Our work included the following:  • Gaining an understanding of the existing hot cut process;  • Studying Qwest's hot cut performance to date;  • Reviewing the proposed BHC process, as well as public CLEC comments and
16 17 18 19	Our work included the following:      Gaining an understanding of the existing hot cut process;      Studying Qwest's hot cut performance to date;      Reviewing the proposed BHC process, as well as public CLEC comments and concerns regarding that process;
16 17 18 19 20	<ul> <li>Our work included the following:</li> <li>Gaining an understanding of the existing hot cut process;</li> <li>Studying Qwest's hot cut performance to date;</li> <li>Reviewing the proposed BHC process, as well as public CLEC comments and concerns regarding that process;</li> <li>Making recommendations for process improvements;</li> </ul>
16 17 18 19 20 21	<ul> <li>Our work included the following:</li> <li>Gaining an understanding of the existing hot cut process;</li> <li>Studying Qwest's hot cut performance to date;</li> <li>Reviewing the proposed BHC process, as well as public CLEC comments and concerns regarding that process;</li> <li>Making recommendations for process improvements;</li> <li>Comparing the current hot cut process to the proposed BHC process;</li> </ul>
16 17 18 19 20 21 22	<ul> <li>Our work included the following:</li> <li>Gaining an understanding of the existing hot cut process;</li> <li>Studying Qwest's hot cut performance to date;</li> <li>Reviewing the proposed BHC process, as well as public CLEC comments and concerns regarding that process;</li> <li>Making recommendations for process improvements;</li> <li>Comparing the current hot cut process to the proposed BHC process;</li> <li>Developing a testing plan to be used to judge the quality and efficiency of the</li> </ul>

<sup>&</sup>lt;sup>1</sup> TRO paragraph 487.

During the course of our work, we visited 10 COs, the Qwest CLEC Coordination Center (QCCC), two Loop Provisioning Centers (LPCs), Design Services and two of the three Service Delivery Centers. We observed both the existing hot cut process and the proposed BHC process. We discussed the process and resource requirements with personnel at various locations. The sites we visited are included in Exhibit 3. The people we interviewed are identified in Exhibit 4.

### 5. Overview of the Current Hot Cut Process

Currently, Qwest processes hot cuts individually on a first in, first out basis. The hot cut process consists of three basic activities: (a) order creation and acceptance, (b) planning and pre-wire (Designed, Verified and Assigned Date or DVA) and (c) cut over (Due Date). These activities are performed discretely for each requested hot cut. Local Service Requests (LSRs) are issued by the CLEC to initiate the hot cut for a particular line. Qwest's Service Delivery Centers convert these LSRs into service orders to be provisioned in the network. The LSRs are submitted in two ways; through the Interconnect Mediated Access (IMA) system (submitted through GUI or EDI), or through facsimile. The majority of LSRs are received in IMA and are processed through the automated systems in the Service Delivery Centers.

The service orders are processed and reviewed by two additional departments' automated systems to ensure the line can be cut over as requested by the CLEC. The LPC verifies the loop to the customer premises and Design Services checks the quality of the loop and designs the circuit. These steps are typically completed within one day of the LSR submittal.

Once a service order is created and accepted, Qwest prepares for the hot cut in the days prior to the Due Date. The QCCC is responsible for scheduling, provisioning and assembling work orders to execute the hot cuts for the inside plant on Due Date. The Central Office

1 Technician (COT) "pre-wires" the hot cut by installing cross-connects and jumpers between 2 the Interconnect Distribution Frame (ICDF) and the Main Distribution Frame (MDF) inside the 3 CO. This wiring will remain in place, but unused, until the hot cut Due Date. These steps 4 occur between days two and three of the process. 5 6 On Due Date, the COT performs the hot cut to transfer service from Qwest's switch to the 7 CLEC's switching equipment. The COT first performs a dial tone and Automatic Number 8 Identification (ANI) test on the loop terminating on the CLEC switch and the Qwest switch. If 9 all tests are successful, the COT performs the "lift and lay" to transfer service to the CLEC switch facility. The COT subsequently performs the same dial tone and ANI tests at the 10 protector frame to ensure the hot cut was successful. Once cut over activity is complete on 11 the CO floor, the COT notifies the QCCC that the cut is completed and closes the work order 12 in Qwest's work management system. The QCCC contacts the CLEC with notification of the 13 completed cut. The CLEC is required to reject the hot cut within two hours of completion of 14 the hot cut. If no cuts are rejected, the COT removes the hot cut jumpers from the MDF to 15 16 the Qwest switch. 17 6. Overview of the Batch Hot Cut Process 18 As Planned 19 Qwest's BHC design process has been an iterative one. On December 1, 2003, Qwest 20 21 proposed a BHC process to the CLECs. This process was revised and refined based on the 22 following:

Qwest's internal study of the proposed process;

the proposed process; and,

Hitachi Consulting input.

CLEC input: two multi-day forums were held by Qwest to elicit CLEC comments on

23

24

25

26

The BHC was created to make the hot cut process described above more scalable and efficient for larger volumes of hot cuts. The process is based on grouping multiple service orders for hot cuts into "batches." A CLEC will be required to submit a minimum of 25 lines and a maximum of 100 lines to create a batch. (These batches will be assembled by the QCCC after LSR submission and acceptance.) The COTs will pre-wire lines and perform dial-tone and ANI tests three or four days before Due Date, using a 7-day standard interval. If there is no dial-tone or the incorrect ANI is detected, the CLEC will have until Due Date to correct any CLEC-side issues. On Due Date, COTs will work to cut up to 100 lines between 3:00 am and 11:00 am local time. The CLEC can monitor the status of the project through an online order status tool, or trap and trace capability. The CLEC is required to reject the hot cut within two hours after the BHC is complete. If no cuts are rejected, the COT will remove the hot cut jumpers from the MDF to the Qwest switch. The BHC process is documented in Exhibit 5. As with the hot cut process, the CLEC will have the opportunity to accept or reject any of the hot cuts.

Hitachi Consulting made several process improvement recommendations over the course of our engagement. All of the material process improvement recommendations made by Hitachi Consulting have been addressed to our satisfaction. One example of the recommendations that have been incorporated in the proposed BHC process is requiring CLECs to submit BHC LSRs via the IMA system with the option to fax the order in the event of system outages.

### **Key Process Differences**

In order to gain efficiencies and allow for greater volume, the BHC process will differ from the hot cut process in various ways. The most significant differences are discussed below and are identified in Exhibit 5.

1

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

#### Order Creation and Acceptance

- Significant interactive edits will be built into the IMA system to identify the LSRs
  tagged for the BHC process and to ensure the reduction of input errors, which then
  require additional manual handling by both Qwest and the CLEC.
- Qwest will require that all LSRs submitted for the BHC process must be sent through IMA (GUI or EDI) and faxes will only be allowed when the above systems are unavailable. BHC LSRs will not have the option to be marked for "Manual Handling" by the CLEC thereby, enabling them to flow-through to the Service Order Processor (SOP) electronically.

#### Planning and Pre-wire (DVA)

- An automated sort engine filters out the BHC service orders and assembles batches based on CLEC and CO.
- Multiple work documents, sorted by the location of the jumpers on each frame, are automatically created for the COTs. The documents are organized to maximize efficient wiring procedures in the CO.
- Creation of an automated sort engine to input the wiring information into the spreadsheets used by the COTs.

#### Cut Over

- An online order status notification tool will be created. The CLEC will have the ability to monitor the tool for updates as its own processes dictate.
- The CLEC will not be given time to correct an incorrect dial tone or ANI test problem
  on Due Date. If there is an issue with CLEC dial tone or ANI on Due Date, the line
  will be assigned a Jeopardy status using the online order status tool and the line will
  be removed from the batch.
- QCCC updates in WFA-C as well as CO updates in FOMS/TIRKS are no longer manual processes. These processes have been automated.